

IV. AMENDMENTS TO THE CLAIMS

1. (CURRENTLY AMENDED) A method of manufacturing an open polyimide molding product which comprises

bringing a polyimide film into an intimate contact with a molding die having a concave molding surface so as to tightly close an open end thereof; to form a space on the side of the molding die surrounded by the polyimide film and concave molding surface;

disposing a pressing die to the open end of the molding die so as to seize the polyimide film to form a space on the side of the pressing die surrounded by the polyimide film and an inner surface of the pressing die;

bending, during an initial stage, to deform the polyimide film under contactless heating only by a pressure difference of gas, pressurizing gas in the space on the side of the pressing die; and

at a final stage of the bending deformation, simultaneously depressurizing a space on one side of the molding die gas in the space on the side of the molding die and pressurizing a space on an opposite side relative to the polyimide film for providing the pressure difference at least in a final stage of the bending deformation gas in the space on the side of the pressing die thereby bringing the polyimide film into intimate contact with the concave molding surface to eliminate a gap between the polyimide film and concave molding surface.

2. (CURRENTLY AMENDED) A method of manufacturing an open polyimide molding product as defined in claim 1, wherein ~~a pressing die is disposed to the open end of the molding die so as to seize the polyimide film, and the~~ polyimide film is heated in a contactless manner by disposing a heating portion to the pressing die and/or the molding die thereby radiating radiation heat and/or releasing a heating gas from the pressing die.

3. (PREVIOUSLY PRESENTED) A method of manufacturing an open polyimide molding product as defined in claim 2, wherein a porous metal or a number of pores are disposed to the concave molding surface of the molding die and the inner surface of the pressing die, and the space on the side of the molding die is

depressurized and/or the space on the side of the pressing die is pressurized by way of the porous metal or the pores.

4. (PREVIOUSLY PRESENTED) A method of manufacturing an open polyimide molding product as defined in claim 2 or 3, wherein a cooling portion is disposed to the molding die and/or the pressing die, and the shape of the polyimide film after molding is fixed by the cooling effect of the cooling portion and/or releasing the cooling gas from the pressing die.

5. (PREVIOUSLY PRESENTED) A substrate for a reflector for use in illumination equipment manufactured from an open polyimide molding product obtained by the manufacturing method as defined in any one of claims 1 to 3.

6. (PREVIOUSLY PRESENTED) A substrate for a reflector for use in illumination equipment manufactured from an open polyimide molding product obtained by the manufacturing method as defined in claim 4.

7. (PREVIOUSLY PRESENTED) An apparatus for manufacturing an open polyimide molding product for practicing the method as defined in any one of claims 1 to 3, wherein a molding section is constituted with a molding die having a concave molding surface and a pressing die in press contact with an open end of the molding die, the molding die is connected with a negative pressure source and the pressing die is connected with a pressurization source.

8. (PREVIOUSLY PRESENTED) An apparatus for manufacturing an open polyimide molding product for practicing the method as defined in claim 4, wherein the molding section comprises a molding die having a concave molding surface and a pressing die in press contact with an open end of the molding die, the molding die is connected with a negative pressure source and the pressing die is connected with a pressurization source.

9. (PREVIOUSLY PRESENTED) An apparatus for manufacturing an open polyimide molding product as defined in claim 7, wherein a film supply

mechanism for supplying and setting a polyimide film to the molding section is disposed.

10. (PREVIOUSLY PRESENTED) An apparatus for manufacturing an open polyimide molding product as defined in claim 8, wherein a film supply mechanism for supplying and setting a polyimide film to the molding section is disposed.

11. (PREVIOUSLY PRESENTED) An apparatus for manufacturing an open polyimide molding product as defined in claim 7, wherein a molding product take out mechanism is disposed for taking out a molding product from the molding section.

12. (PREVIOUSLY PRESENTED) An apparatus for manufacturing an open polyimide molding product as defined in claim 8, wherein a molding product take out mechanism is disposed for taking out a molding product from the molding section.

13. (PREVIOUSLY PRESENTED) A method of manufacturing an open polyimide molding product according to claim 1, wherein the concave molding surface has a depth and the final stage commences when the bending deformation of the film reaches a distance in a range of approximately 40% to 99% of the depth of the concave molding surface.